

42 S236580



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

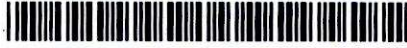
D6102-010
Job Sheet 202678



Part No: D6102-010

Job Qty: 32 pcs

Part Name: Saddle Billet



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 10/31/19

Job Tracking No:

Due Date: 11/27/19

Created By: Chantal Lavoie

Type: Stock

Description:

Note: DWG REV D

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Purchasing	32		11/27/19	0.00	0.00	Purchasing - 1	DAS	DEC 02 2019
	OCT 31 2019	pcs					Purchasing - 2	81	
							Purchasing - 3	9-89	
110	Packaging 2-1 - Receive - B4B	32		11/27/19	0.00	0.00	Packaging 2 - 1 - B4B		
		pcs					Packaging 2 - 2 - B4B		
							Packaging 2 - 3 - B4B		
							Packaging 2 - 5 - B4B		
							Packaging 2 - 4 - B4B		
							Packaging 2 - 6 - B4B		
							Packaging 2 - 7 - B4B		
							Packaging 2 - 8 - B4B		
							Packaging 2 - 9 - B4B		
							Packaging 2 - 10 - B4B		
							Packaging 2 - 11 - B4B		
							Packaging 2 - 12 - B4B		
							Packaging 2 - 13 - B4B		
							Packaging 2 - 14 - B4B		
							Packaging 2 - 15 - B4B		
							Packaging 2 - 16 - B4B		
							Packaging 2 - 17 - B4B		
							Packaging 2 - 18 - B4B		
							Packaging 2 - 19 - B4B		DEC 02 2019
							Packaging 2 - 20 -	DAS	

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					B4B	
					Packaging 2 - 21 - B4B	
					Packaging 2 - 22 - B4B	
					Packaging 2 - 23 - B4B	
					Packaging 2 - 24 - B4B	
					Packaging 2 - 25 - B4B	
					Packaging 2 - 26 - B4B	
					Packaging 2 - 27 - B4B	
					Packaging 2 - 28 - B4B	
					Packaging 2 - 29 - B4B	
					Packaging 2 - 30 - B4B	
					Packaging 2 - 31 - B4B	
					Packaging 2 - 32 - B4B	
					Packaging 2 - 33 - B4B	
					Packaging 2 - 34 - B4B	
					Packaging 2 - 35 - B4B	
					Packaging 2 - 36 - B4B	
					QC 6 - 9	
					QC 6 - 68	
					QC 6 - 61	
					QC 6 - 40	
					QC 6 - 81	
120 QC 6	32 pcs	11/27/19	0.00	0.00	QC 6 - 9	
					QC 6 - 68	
					QC 6 - 61	
					QC 6 - 40	
					QC 6 - 81	
130 Packaging 3-1 - Stock - B4B	32 pcs	11/27/19	0.00	0.00	Packaging 3 - 1 - B4B	
					Packaging 3 - 2 - B4B	
					Packaging 3 - 3 - B4B	
					Packaging 3 - 4 - B4B	
					Packaging 3 - 5 - B4B	
					Packaging 3 - 6 - B4B	
					Packaging 3 - 7 - B4B	
					Packaging 3 - 8 - B4B	
					Packaging 3 - 9 - B4B	
					Packaging 3 - 10 - B4B	
					Packaging 3 - 11 - B4B	
					Packaging 3 - 12 - B4B	
					Packaging 3 - 13 - B4B	
					Packaging 3 - 14 - B4B	
					Packaging 3 - 15 - B4B	
					Packaging 3 - 16 - B4B	
					Packaging 3 - 17 - B4B	

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				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	

140 QC 21 - SA	32 pcs	11/27/19	0.00 0.00	QC 21 - SA - 21	DAS
				QC 21 - SA - 70	21
				QC 21 - SA - 53	9-88

DEC 03 2019

Part Op 100 - Issue P/O: 244962 a) Description: Aluminum Billet b) 7.950" x 8.250" x 2.500" thick c) Tolerance on all Descriptions: dimensions is +0.06/0.00 d) Grain direction along 7.950" length e) Material: 6061-T6/T6511 (QQ-A-250/11 or QQ-A-200/8)

Material release certifi

110 - (Receive & Inspect for Damage & Mat'l Certs) Ensure material certification is attached

120 - (QC6- All purchased or subcontracted products) Check certification to Dwg D6102 for compliance

130 - (Identify as per dwg & Stock Location: _____) LOCATION: MAT045

140 - (QC21- Final Inspection - Work Order Release)

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D6102-010P	6061-T6 8.25X7.95X2.5	32 pcs (1 ea)	100-Purchasing	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	D6102-010P	32	0	0

Part Specifications

Specifications could not be found.

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LINE 1 / D6102-010

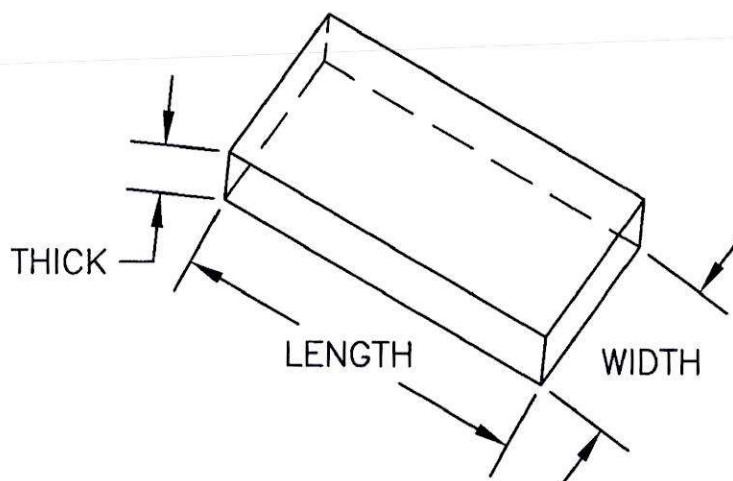


DESIGN #	DRAWN BY PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED UP	APPROVED #	DRAWING NO. D6102	Rev. D SHEET 1 OF 1
DATE 06.06.30		TITLE SADDLE BILLET, 6061	SCALE NTS
A	01.03.30	NEW ISSUE	
B	03.10.20	ADD D6102-005/-007/-009	
C	04.08.25	ADD D6102-010/-011	
D	06.06.30	ADD D6102-013	

LINE 1

D6102-010
6061

SPECIFICATION CONTROL DRAWING



RELEASED

06.08.15 #

PURCHASE MATERIAL ACCORDING TO THE FOLLOWING TABLE. SPECIFY ALLOY, LENGTH x WIDTH x THICK (+0.06/-0.00), AND GRAIN DIRECTION AS SHOWN.

TOLERANCE ON ALL DIMENSIONS IS +0.06/-0.00.

ALL DIMENSIONS ARE IN INCHES.

Part No.	Alloy	Length	Width	Thick	Grain Direction
D6102-001	6061-T6/T651 (QQ-A-250/11 or QQ-A-200/8)	7.880	6.250	2.000	Along 7.880 Length
D6102-003	6061-T6/T651 (QQ-A-250/11 or QQ-A-200/8)	6.000	6.250	2.000	Along 6.000 Length
D6102-005	6061-T6/T651 (QQ-A-250/11 or QQ-A-200/8)	47.85	15.250	1.000	Along 47.85 Length
D6102-007	6061-T6/T651 (QQ-A-250/11 or QQ-A-200/8)	7.500	7.000	2.500	Along 7.500 Length
D6102-009	6061-T6/T651 (QQ-A-250/11 or QQ-A-200/8)	11.000	6.000	5.000	Along 11.000 Length
→ D6102-010	6061-T6/T651 (QQ-A-250/11 or QQ-A-200/8)	7.950	8.250	2.500	Along 7.950 Length
D6102-011	6061-T6/T651 (QQ-A-250/11 or QQ-A-200/8)	6.500	8.250	2.500	Along 6.500 Length
D6102-013	6061-T6/T651 (QQ-A-250/11 or QQ-A-200/8)	6.500	7.000	2.000	Along 6.500 Length

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Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB044962



Supplier: MEC002-VU
Metaux Castle
P.O. Box 4090 Stn A
Toronto
ON
M5W OE9 Canada

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB044962

PO Date: 10/31/19

Due Date: 11/27/19

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Lavoie, Chantal
Phone: 613-623-5200 Ext: 242
Fax: 613-632-1053
clavoie@dartaero.com

Via: Ground

Pynt Terms: Net 60

Freight Terms:

Special Comments:

E-MAILED
NOV 01 2019

Items

Line Item	Job	Part	Drawing	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
1		D6102-010P	D6103		6061-T6 8.25X7.95X2.5 : AS PER DWG D6102 REV. D MATERIAL: 6061-T6/T651 PER QQ-A- 250/11 OR QQ- A-200/8 SIZE: 7.950" LENGTH X 8.250" WIDTH X 2.500" THICK GRAIN DIRECTION ALONG 7.950" LENGTH TOLERANCE ON ALL DIMENSION +0.06/-0.00. receive pcs	Firmed	-	11/27/19	32 pcs	0 pcs	32 pcs	\$61.55/pcs	\$1,969.60

32
pcs

NOV 29 2019

Grand Total: \$1,969.60



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER
POHB044962



Order Notes

Procurement Quality Clauses

A005 right of entry

A012 chemical and physical test report

A016 personnel qualification

A017 raw material identification (as applicable). No Raw Metals from China or Soviet Bloc Countries. (DFARS)

A026 certification of material conformance

A041 quality management system

A042 dart notification by supplier

A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program.

A049 supplier awareness.

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 10/31/19 1:57 PM Dart.Lavoie.Chantal

**Castle Metals®**

A. M. Castle & Co.

PACKING SLIP/
CERTIFICATE OF CONFORMANCE

Page 1 of 2

Shipment No:4050173

Ship From: A. M. CASTLE & CO. 2150 ARGENTIA ROAD MISSISSAUGA, ON L5N 2K7 CAN		Sold To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA		Ship To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CAN		Deliver To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA	
Date Shipped	Inco Terms	Freight Terms		Carrier		BOL No	
27-NOV-19	FCA HAWKESBURY ON CAN	Prepay & Add		LOCAL_FLEET		4050173-6	

Shipment Details	Final Destination Branch - TOR
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Order No	Line No	Item No	Description				
5645472	1	14670.MO	2.5000.PL.6061.T651.ALUMINUM.48.5000.144.5000 CUT RECTANGLE TO 8.25 IN (+ .0620/- .0000 IN (GRAIN TO RUN ALONG 7.95")) X 7.95 IN (+ .0620/- .0000 IN (GRAIN TO RUN ALONG 7.95")) - ALUMINUM PLATE SAW SPECIFICATIONS: AMS 4027				
Purchase Order No		Part Number		Ordered Qty		Invoice Qty	
POHB044962		YOUR ITEM NUMBER: D6102-010		32.00 PCS		32.00 PCS	
Details		ALL PAPERWORK MUST FOLLOW ORDER / CUSTOMER MUST RECEIVE AT TIME OF DELIVERY ALL MATERIAL MUST HAVE IDENTIFYING MARKINGS EX:HEAT #S Email P/s and certs to: clavoie@dartaero.com END USER: DART AEROSPACE END USE: COMMERCIAL AIRCRAFT PARTS					
Delivery No.	Mill	Heat Number	Mech Id	PCS	Width (IN)	Length (IN)	Shipped Qty(LBS)
122987782	KAISER ALUMINUM	 228450B3	HT 603 Vm	20			329.0941
122987782	KAISER ALUMINUM	 228450B3		6			98.7282



Castle Metals®

A. M. Castle & Co.

PACKING SLIP/
CERTIFICATE OF CONFORMANCE

Page 2 of 2

122987782	KAISER ALUMINUM		6			98.7282
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These items are controlled by the U.S. Government and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. Government or as otherwise authorized by U.S. law and regulations.

We hereby certify the material covered by this certification conforms in accordance with the above specifications and has been found to meet the applicable requirements for the material, including any specifications forming a part of the description. Test reports are on file subject to examination. All claims for defective material are waived unless made in writing to A.M. Castle & Co. within 60 days of the shipment. Material cut to the correct size, or material cut by the customer cannot be returned for credit.

Reviewed by Authorized Castle Metals Representative:

Date: Name:

NOV 27 2019

SHIP TO:

A M CASTLE METALS
4175 ROYAL DRIVE, SUITE 600
KENNESAW, GA 30144

KAISER ALUMINUM

Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

CERTIFIED TEST REPORT

SOLD TO:

AM CASTLE & CO- SOLD TO
1420 KENSINGTON RD
SUITE 220
OAK BROOK, IL 60523

Serial Number

4479437

CUSTOMER PO NUMBER: 428280-1	WORK PACKAGE:	CUSTOMER PART NUMBER: 14670	SHIP RUN/LOAD: 104052/7	GOVT CONTRACT NUMBER:
KAISER ORDER NO: 1239357-1	SHIP DATE: 26-SEP-2017	ALLOY: 6061	CLAD: BARE	TEMPER: T651
WEIGHT SHIPPED: 5220 LB	QUANTITY: 3 PCS EST.	TRUCK B/L #: 2069182	GAUGE: 2.5000 IN (63.5000 MM)	DIAMETER/WIDTH: 48.500 IN (1231.9 MM)
				LENGTH: 144.500 IN (3670.3 MM)

MHU 2147815: LOT 228450B3: 1 pieces;

MHU 2148013: LOT 228387B7: 2 pieces;

Certified Specifications

AMS 4027/RevN
EN 10204-3.1/Rev2004

ASME SB 209/Rev2010

ASTM B 209/Rev14

Test Code: 1511

Lot: 228387B7 Cast 145

Drop 89

Test Results

Ingot 2

Melted in USA

(ASTM E8/B557)

(EN 2002-1)

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T651	LT / 3 (Min:Max)	49.2 : 49.4 (339 : 341)	44.6 : 44.6 (308 : 308)	13.1 : 13.4



(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual(wt%)	0.71	0.5	0.32	0.12	1.0	0.19	0.13	0.02	0.01	0.00	TOT 0.04
Lot: 228450B3	Cast 145		Drop 83		Ingot 5						Melted in USA

(ASTM E8/B557)

(EN 2002-1)

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T651	LT / 2 (Min:Max)	48.1 : 48.1 (332 : 332)	42.6 : 42.7 (294 : 294)	14.3 : 14.4

(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual(wt%)	0.67	0.5	0.30	0.12	1.1	0.19	0.16	0.02	0.01	0.00	TOT 0.03

KAISER ALUMINUM

Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number
4479437

ALLOY LIMITS

	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
6061												
MIN(wt%)	0.40	0.0	0.15	0.00	0.8	0.04	0.00	0.00	0.00	0.00	EACH	0.05
MAX(wt%)	0.8	0.7	0.40	0.15	1.2	0.35	0.25	0.15	0.05	0.05	TOT	0.15

Aluminum Remainder

ORDER COMMENTS

AMC A96061-162 R 3

TEST NOTES

6061 sheet or plate certified to AMS 4025, AMS 4026, or AMS
4027 also meets applicable requirements of cancelled
specification AMS-QQ-A-250/11, Rev. A.

OK

CERTIFICATION

Kaiser Aluminum, Trentwood Works, is ISO 9001, AS9100, and ISO 14001 certified, and hereby certifies that all material shipped under this order:

- * has been inspected, tested, and found to be in conformance with the requirements of the specifications indicated herein.
- * All test equipment and measuring devices are calibrated and certified in accordance applicable specifications. For material thicknesses outside specification limits, mechanical properties are as shown herein and chemical composition meets specification requirements. Reported elongation values have been measured as elongation at fracture.
- * was melted in the United States of America or a qualifying country per DFARS 225.872-1(a), was manufactured in the United States of America, and meets the requirements of DFARS 252.225 for domestic content.
- * has been thermally processed in compliance with AMS 2772, where applicable.
- * is mercury free, within the limits of detection of ASTM E1215 (< 1ppm).
- * is in compliance with RoHS 2, European Union Directive 2011/65/EU.
- * is in compliance with European Chemical Agency, ECHA, REACH regulations, (EC) No 1907/2006, and Kaiser regularly monitors these regulations for updates.
- * is free of Conflict Minerals, as defined in Section 15.2 of the Dodd-Frank Act.
- * is free of weld repair.
- * meets the reporting requirements of EN10204, Type 3.1.

Any warranty is limited to that shown on Kaiser Aluminum's standard general terms and conditions of sale. Test reports are on file, subject to examination. Test reports shall not be reproduced except in full, without the written approval of the Kaiser Aluminum laboratory. The recording of false, fictitious or fraudulent statements or entries on the certificate may be punished as a felony under federal law.

James Hemmenway

JAMES HEMENWAY, TECHNICAL PROCESS MANAGER

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: D6102-010
DATE: 2019-11-28

PO / BATCH NO.: POH8044962 / 5235943

MATERIAL CERT REC'D: YES
QUANTITY RECEIVED: 32 PCS
QUANTITY INSPECTED: 32 PCS
QUANTITY REJECTED: 0

THICKNESS ORDERED: 2.500X8.250X7.950
THICKNESS RECEIVED: 2.500X8.250X7.950
SHEET SIZE ORDERED: —
SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	(N)	
CORRECT FINISH	(Y)	N	
CORROSION	Y	(N)	
CORRECT GRAIN DIRECTION	(Y)	N	
CORRECT MATERIAL PER M-DRAWING	(Y)	N	AMS-QQ-A-250
CORRECT THICKNESS	(Y)	N	
PHOTO REQUIRED	Y	(N)	
CORRECT REF # TO LINK CERT	(Y)	N	H/T 228450B3
CORRECT MATERIAL IDENTIFICATION	(Y)	N	
CORRECT M# ON THE MATERIAL	(Y)	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	(N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	(N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>[Signature]</u>	SIGNED OFF BY: <u> </u>		
DATE: <u>2019-11-28</u>	DATE: <u> </u>		

DAS
81
9-89

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in